
(12) **UK Patent Application** (19) **GB** (11) **2 056 737 A**

(21) Application No **8023725**

(22) Date of filing
21 Jul 1980

(30) Priority data

(31) **79/25457**

(32) **20 Jul 1979**

(33) **United Kingdom (GB)**

(43) Application published
18 Mar 1981

(51) **INT CL³ G07F 17/34**

(52) Domestic classification
G4V 118 AA

(56) Documents cited
None

(58) Field of search
G4V

(71) Applicant
**Maygay Machines
Limited
Primrose Avenue
Fordhouses
Wolverhampton
West Midlands**

(72) Inventors
**Donald Samuel Towson
Laurence Irvin Turner**

(74) Agents
**Forrester Ketley & Co
Rutland House
148 Edmund Street
Birmingham B3 2LD**

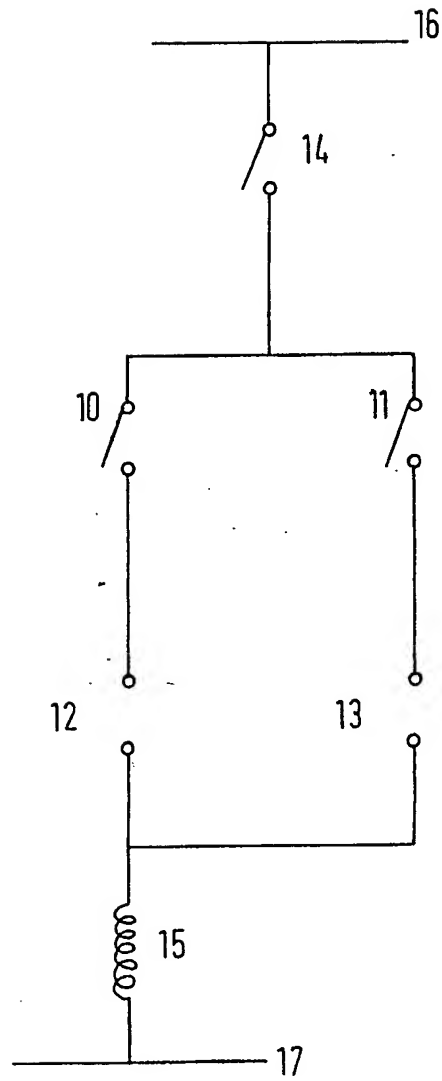
(54) **Gaming machine**

(57) A gaming machine of the kind in which at the end of a game a random combination of symbols, one from each of two or more groups of symbols (carried for example by rotary reels which are rotated and arrested in random positions) is indicated, the player winning in the event of the indicated combination being any one of a number of predetermined combinations. The machine has a special gambling feature provided by two push-buttons which are rendered operative when a particular winning combination of symbols is indicated. The functions of the push-buttons are changed from time to time so that at any one time operation of one would provide a win and operation of the other would merely initiate another game

whereby the player has to gamble in selecting which push-button to operate in order to win.

U
N
I
T
E
D
K
I
N
G
D
O
M

1/1



SPECIFICATION

Gaming machines

5 *Description of Invention*

This invention relates to gaming machines of the kind (hereinafter referred to as the kind specified) commonly known as fruit machines, and in which at the end of a game initiated by operation of a starting means by a player a random combination of symbols, one from each of two or more groups of different symbols, is indicated, winnings being credited or paid out to the player in the event of the indicated combination of symbols being any one of a number of predetermined winning combinations.

In such a machine the starting means may be constituted by a coin-operated means adapted, on insertion of a coin (or a money token) into the machine, to start a game, or the machine may have a coin-freed means adapted, on insertion of a coin (or a money token), to render the starting means operative, the game then being started when the player operates the starting means which may be a push-button or handle.

The invention has been devised primarily in connection with gaming machines of the type in which the two or more groups of symbols are carried by the peripheries of a corresponding number of rotary drums or reels, these drums or reels being rotated on operation of the starting means and being arrested in random positions at the end of the game so that a random combination of symbols is displayed through a window in a housing of the machine.

The invention is also applicable to gaming machines of the type in which the symbols are projected onto a screen.

The invention may also be applied to gaming machines of the type wherein the groups of symbols are carried by a display panel and during a game lamps disposed behind the respective symbols of each group are illuminated in sequence, a random combination of symbols remaining illuminated at the end of the game.

The object of the present invention is to provide a gaming machine which has a novel and entertaining gambling feature.

According to the invention there is provided a gaming machine of the kind specified having at least two normally inoperative operating means which are occasionally rendered operative whereupon operation of one of the operating means by a player would cause winnings to be paid out or credited to the player and operation of the other operating means by the player would initiate a play, and control means adapted to change the functions of the operating means from time to time so that the player is unaware whether operation of a selected one of the operating means at any

one time will result in the paying out or crediting of winnings.

Seen from another aspect the invention provides a gaming machine of the kind specified having a normally inoperative gambling means which is rendered operative at times, the gambling means comprising at least two operating means and control means adapted randomly to control the functions of the operating means so that at any one time one of the operating means is operable by a player to cause winnings to be paid out or credited to the player and the other operating means is operable by the player to initiate a play, whereby a player has to gamble in selecting which of the operating means to operate in order to win.

Thus the control means determines which of the operating means will provide a win if operated by the player at any one time, the other operating means, if operated, merely providing a play, for example rotation of the reels or drums and their arrest in positions displaying a random combination of symbols. The player, not knowing the functions of the operating means, must gamble in choosing which of the operating means to operate.

Preferably, operation by the player of that operating means which is operable to provide a win, not only causes winnings to be paid out or credited, but also causes the operating means to remain operative for the next play. The gambling feature may be made available to the player an unlimited number of times (provided, of course, that the player selects the winning operating means on each play) or the machine may include means for limiting the number of times the operating means can be rendered operative in any one sequence of plays.

If the player selects the operating means which merely initiates an ordinary play, the operating means are returned to their normally inoperative state.

The operating means are preferably rendered operative in response to the indication at the end of a play of a predetermined combination of symbols.

The said combination of symbols may be a predetermined one of the winning combinations of the machine or it may be any combination of symbols selected at random to provide the gambling feature by a random control means provided in the machine.

Where the machine is of the conventional kind having a coin-operated or coin-freed means as described above requiring the insertion of a coin (or a money token) for each game, a play which results in the operating means being rendered operative, and the next play when the operating means may be operated, may together constitute a said game so that no coinage has to be inserted for the second of the two plays. Preferably, however, each play constitutes a game so that coinage

has to be inserted for the second play.

Preferably the machine has only two operating means so that the player has a 1:1 chance of selecting the winning one. If desired, how-

5 ever, the machine may have three or more operating means of which at any one time one is operable to provide a win and the others are operable to initiate a play, so that the odds are increased accordingly. For example,
10 the odds are 3:1 with four operating means.

Each operating means may be a push-button arranged to operate a switch in an electrical circuit of the machine.

The winnings paid out or credited to the
15 player in a play which results in the operating means being rendered operative may be the highest winning amount awarded by the machine. The winnings paid out or credited if the player selects the winning operating means on
20 the next play may be the same or different. If on the next play the player selects the operating means which initiates a play, it is possible that this play will result in a normal winning combination of symbols or a combination
25 which renders the operating means operative again.

The control means may be adapted to change the functions of the operating means repeatedly throughout each period during
30 which the operating means are operative, i.e. from the moment the operating means are rendered operative until the player operates one of said means. Alternatively the functions of the operating means may remain un-
35 changed throughout each such period, being changed only before randomly selected periods.

The machine may include means which came into action at random times, except
40 when the operating means are operative, to provide a so-called "hold" facility whereby in a play the player has the option of holding one or more symbols which have been indicated in the previous play so that the held
45 symbols remain indicated at the end of said play.

The invention will now be described by way of example with reference to the accompanying drawing which shows part of the electrical
50 circuit of one form of gaming machine embodying the invention.

The gaming machine of this example is of the known kind comprising three rotary reels or drums each carrying around its periphery a
55 series of different symbols such as pictorial representations of different fruits of which some or all may appear two or more times on the reel, a coin-freed mechanism, a starting means such as a push-button which is rendered operative on insertion of a coin (or a
60 money token) into the coin-freed mechanism and, when operated by a player to initiate a game, causes the reels to rotate freely and independently, means for arresting the reels
65 automatically and in random positions at the

end of a game so that a random combination of symbols, one from each series, is displayed in a line through a window in a housing of the machine, and means for paying out winnings

70 to the player if the displayed combination of symbols in any one of a number of predetermined winning combinations of symbols. Winnings of different values are paid out for different winning combinations, for example
75 10 pence for two identical symbols displayed on the first and second reels and 20 pence for three identical symbols on all three reels.

The reels each carries a wiper arm arranged on rotation of the reel to wipe over two
80 circular series of fixed electrical contacts, the contacts of the respective series being arranged in pairs corresponding to the symbols on the reel. When each reel comes to rest at the end of a game its wiper bridges the pair
85 of contacts corresponding to the symbols displayed. If at the end of a game a winning combination of symbols is displayed, the bridging of the relevant pairs of contacts of the two or three reels causes the means for
90 crediting or paying out winnings to be operated.

In accordance with the invention the machine has a special gambling feature which is brought into effect at the end of a game in
95 the event of a particular one of the winning combinations of symbols being displayed.

This feature is provided by two operating means constituted by two normally open electrical switches 10, 11 each closable by means
100 of a push-button, the two push-buttons being mounted side-by-side on the machine housing so as to be accessible to a player. The two switches are connected in series with respective pairs of studs 12, 13 and the two series
105 combinations 10, 12 and 11, 13 are connected in parallel with one another and, through the contacts 14 of a feature relay and the coil 15 of a repeat relay, across two electrical supply lines 16, 17.

110 The two pairs of contacts 12, 13 are wiped at appropriate times by a wiper which then comes to rest in a random position bridging one or the other of the pairs of contacts.

The machine operates in the following manner to provide the special gambling feature.

When the reels come to rest at the end of a game displaying the particular winning combination of symbols which initiates the special gambling feature, the means for paying out
120 winnings are operated. The amount paid out may be the highest paid out by the machine, for example 50 pence or £1.00.

In addition the feature relay is operated to close its contacts 14 as a result of the bridging of the pairs of studs corresponding to the
125 three symbols making the winning combination.

The player then has to insert another coin into the coin-freed mechanism to provide the
130 next (second) game. The machine has means

to indicate that the special gambling feature has come into effect, for example lights associated with the push-buttons flash on and off, and the player must now initiate the next game, not by operating the starting means, but by depressing one or the other of the push-buttons of the switches 10, 11.

With one of the pairs of contacts 12 or 13 bridged by the associated wiper according to the random position to which it has moved, if the player operates the push-button of that switch 10 or 11 in series with said bridged pair of contacts, then the circuit through the repeat relay coil 15 will be completed. The contacts of the relay are normally closed, and when the relay is energised it opens its contacts and thereby isolates the parts of the machine circuit which control the ordinary operation of the machine. The means for paying out winnings are operated again, and the wiper associated with the contacts 12, 13 is operated so that it comes to rest in a random position in which it may bridge the same pair of contacts as for the first game or the other pair. The feature relay 14 remains operative so that the special gambling feature remains in effect for the next (third) game.

If, for the second game, the player depresses the push-button of the switch 10 or 11 in series with the contacts 12 or 13 which have remained open, then the circuit through the repeat relay coil 15 is not completed and there is no repeat pay-out of winnings to the player. Instead the reels are set spinning to provide an ordinary game which may or may not result in a winning combination of symbols providing either an ordinary win or the special gambling feature.

The player does not, of course, know which of the two push-buttons to press in order to achieve a repeat pay-out, and there is a 50/50 chance that he or she will select the winning button. The special gambling feature will remain in effect for a number of games provided the player presses the "right" button each time. The winning button may change from game to game, unknown to the player, according to the random selection of the pairs of contacts 12, 13 by the associated wiper.

The machine returns to ordinary operation after a game in which the player has pressed the "wrong" button.

Instead of electro-mechanical wipers for sensing the positions of the reels at the end of a game and hence the combination of symbols displayed, the machine may have other means for this purpose, for example electronic or electrical means controlled by infra-red scanners arranged to detect apertures in discs associated with the reels.

In a modification of the machine the functions of the push-buttons may be controlled by an electronic means which operates to change the functions repeatedly throughout each period during which the push-buttons

are operative.

CLAIMS

1. A gaming machine of the kind specified having at least two normally inoperative operating means which are occasionally rendered operative whereupon operation of one of the operating means by a player would cause winnings to be paid out or credited to the player and operation of the other operating means by the player would initiate a play, and control means adapted to change the functions of the operating means from time to time so that the player is unaware whether operation of a selected one of the operating means at any one time will result in the paying out or crediting of winnings.

2. A gaming machine of the kind specified having a normally inoperative gambling means which is rendered operative at times, the gambling means comprising at least two operating means and control means adapted randomly to control the functions of the operating means so that at any one time one of the operating means is operable by a player to cause winnings to be paid out or credited to the player and the other operating means is operable by the player to initiate a play, whereby a player has to gamble in selecting which of the operating means to operate in order to win.

3. A gaming machine as claimed in claim 1 or 2 wherein operation by the player of that operating means which is operable to provide a win, not only causes winnings to be paid out or credited, but also causes the operating means to remain operative for the next play.

4. A gaming machine as claimed in claim 3 which includes means for limiting the number of times the operating means can be rendered operative in any one sequence of plays.

5. A gaming machine as claimed in any one of the preceding claims wherein the operating means are rendered operative in response to the indication at the end of a play of a predetermined combination of symbols.

6. A gaming machine as claimed in claim 5 wherein the said combination of symbols is a predetermined one of the winning combinations of the machine.

7. A gaming machine as claimed in claim 5 or 6 which has a coin-operated or coin-freed means requiring the insertion of a coin (or a money token) for each game, wherein a play which results in the operating means being rendered operative, and the next play when the operating means may be operated, each constitutes a game so that coinage has to be inserted for the second play.

8. A gaming machine as claimed in any one of the preceding claims which has only two said operating means.

9. A gaming machine as claimed in any one of the preceding claims wherein each

operating means is a push-button arranged to operate a switch in an electrical circuit of the machine.

5 10. A gaming machine as claimed in any one of the preceding claims wherein the control means is adapted to change the functions of the operating means repeatedly throughout each period during which the operating means are operative.

10 11. A gaming machine as claimed in any one of claims 1 to 9 wherein the control means is adapted to change the functions of the operating means only before randomly selected periods of operation of the operating

15 means, the functions remaining unchanged through each such period.

12. A gaming machine as claimed in any one of the preceding claims which includes means which come into action at random
20 times, except when the operating means are operative, to provide a "hold" facility whereby in a play the player has the option of holding one or more symbols which have been indicated in the previous play so that the
25 held symbols remain indicated at the end of said play.

13. A gaming machine substantially as herein described with reference to the accompanying drawings.

30 14. Any novel feature and/or combination of novel features herein described.